UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,602	03/01/2004	Lyndsay Williams	306985.01	9169

22971 7590 12/21/2006

MICROSOFT CORPORATION
ATTN: PATENT GROUP DOCKETING DEPARTMENT
ONE MICROSOFT WAY
REDMOND, WA 98052-6399

EXAMINER	
BERTRAM, ERIC D	
ART UNIT	**PAPER NUMBER**
3766	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/790,602	WILLIAMS ET AL.	
	Examiner	Art Unit	
	Eric D. Bertram	3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) *34-43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/1/04,9/13/04,3/10/05,7/26/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species: Species A, the embodiment wherein image capture and storage occurs only upon detection of a capture condition; and Species B, the embodiment wherein image capture is continuous, and storage in memory is dependent on the existence of a capture condition. The species are independent or distinct because the embodiments vary in scope and would thus require divergent searches.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. During a telephone conversation with Steven Spellman on 12/4/2006 a provisional election was made without traverse to prosecute the invention of Species A, claims 1-33. Affirmation of this election must be made by applicant in replying to this Office action. Claims 34-43 are withdrawn from further consideration by the examiner, in accordance with 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

4. The information disclosure statements (IDS) submitted on 3/1/04, 9/13/04, 3/10/05 and 7/26/05 were filed in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 32 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Upon reviewing the specification, the preamble of a "computer program product" can include a computer data signal embodied in a carrier wave (see page 2, lines 15-17). While a carrier wave is a real entity, it is not

tangible as required by 35 USC 101, and the claim is rendered non-statutory. See MPEP 2106.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 10, 12, 17, 28 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson (US 4,901,096). Lemelson discloses a portable recall device 10 configured to be carried by a user (read as a wearer), which includes a camera 10A (see figure 1 and Col. 1, lines 8-12). Lemelson further discloses an accelerometer 16 operably connected to the camera such that when switch 13 is depressed (read as a capture condition), the accelerometer will only trigger capture of an image if a stable condition is detected (Col. 3, lines 12-29).

8. Regarding claims 10 and 26, the accelerometer inherently detects the change in motion of the user since the device is held by the user.

9. Regarding claim 32, the microprocessor or computer 11 must inherently be encoded with a computer program from a computer program product in order to carry out the steps described above.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 5, 6, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Horimoto (US 4,009,943). Lemelson, as described above, discloses the applicant's basic invention with the exception of using a wide-angle, fish-eye lens. However, the use and advantages of a wide-angle, fish-eye lens is notoriously old and well known in the art, as taught by Horimoto (Col. 1, lines 11-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time

of the applicant's invention to modify the device of Lemelson by including a wide-angle, fish-eye lens in order to capture the true perspective of what the actual object would appear to an observer (Col. 1, lines 13-18).

14. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Moultrie, Jr. (US 2002/0159770, hereinafter Moultrie). Lemelson, as described above, discloses the applicant's basic invention with the exception of the capture condition comprising detecting a change in the signal from a passive infrared detector triggered by heat from a person in the proximity of the camera. Attention is directed to the secondary reference of Moultrie, which discloses a camera that is activated by detecting a change in the signal from a passive infrared detector triggered by heat from an animal in the proximity of the camera (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art to modify the camera of Lemelson by adding capture condition detection with an infrared sensor as taught by Moultrie in order to make the system automatic and allow the user to take images of interest without having to be with the camera.

15. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Shiozaki et al. (US 5,978,603, hereinafter Shiozaki). Lemelson, as described above, discloses the applicant's basic invention with the exception of the device being capable of playing digital media. However, attention is directed to the secondary reference of Shiozaki, which discloses a digital camera 1 that is capable of displaying digital media on a LCD display 4 (see figure 2). Therefore, it would have been obvious to replace the film camera of Lemelson with the art-recognized equivalent

digital camera of Shiozaki in order to allow a user to preview images on the display and delete unwanted images without wasting film.

16. Claims 1-4, 7-15, 17-20 and 23-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Ishibashi (US 6,558,050) in view of Grosvenor et al. (US 2003/0025798, hereinafter Grosvenor). Ishibashi discloses a portable recall device 1 that is configured to be carried by a wearer as shown in figure 1. The device includes a camera, as well as a three dimensional head orientation detecting unit 4 (Col. 2, lines 30-56). As shown in figure 4, if the head orientation detecting unit detects a capture condition in that the head orientation has not greatly changed (step #45). If this capture condition is followed by the detection of a stable head orientation by the head orientation detecting unit at step #50, then an image capture is triggered at step #70. However, Ishibashi is silent as to whether the head orientation detecting unit comprises at least one accelerometer or a gyroscope. While the use of gyroscopes and/or accelerometers are notoriously old and well known in the art for detecting rotational/angular movement of an object, attention is directed to the secondary reference of Grosvenor, which discloses the use of one or more gyroscopes or accelerometers to measure movement of a camera that is attached to a user (par. 0068). Specifically, Grosvenor discloses the use of a plurality of accelerometers for detecting rotation along three axes (par. 0069). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of Ishibashi by using at least one gyroscope or accelerometer to detect

angular/rotational movement since Grosvenor demonstrates that they would be fully capable of detecting the head orientation of a subject.

17. Regarding claims 3, 4, 8, 19, 20 and 24, Ishibashi discloses in figure 4 that if a capture condition is detected at step #10 such that a change in ambient sounds is detected but speaking is not, then a stable condition detected at step #50 triggers the capture of an image (Col. 2, lines 57-60 and Col. 4, line 21). Furthermore, the audio data may be recorded in recording unit 12 (Col. 3, lines 15-18)

18. Regarding claims 7, 15, 23 and 30, Ishibashi discloses in figure 4 that if a capture condition is detected at step #35 such that the quantity of change in pupil diameter is not lower than a predetermined level (which can be caused by a change in lighting), then a stable condition detected at step #50 triggers the capture of an image (Col. 4, lines 29-31).

19. Regarding claims 9 and 25, Ishibashi discloses in figure 4 that if a capture condition is detected at step #25 such that the quantity of change in body temperature is not lower than a predetermined level (which can be caused by a change in ambient temperature), then a stable condition detected at step #50 triggers the capture of an image (Col. 4, lines 25-26).

20. Regarding claims 11 and 27, Ishibashi discloses in figure 4 that if a capture condition is detected at step #15 such that the increase in pulse rate is not lower than a predetermined level, then a stable condition detected at step #50 triggers the capture of an image (Col. 4, lines 22-23).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D. Bertram whose telephone number is 571-272-3446. The examiner can normally be reached on Monday-Thursday from 8:30-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric D. Bertram
Examiner
Art Unit 3766

Robert E. Pezzuto
Supervisory Patent Examiner
Art Unit 3766

EDB